

THAT WHICH IS CLAIMED IS:

1. A method of providing web services, the method comprising:
5 creating an electronic record of a contract for a service provider to provide web services meeting a web service category definition at a web services hub of a service domain; and
providing a web service to a service requestor from the service domain responsive to the electronic record of the contract.
- 10 2. A method according to Claim 1, wherein providing a web service to the service requestor comprises providing the service to the service requestor without requiring the service requestor to discover a service instance that provides the service.
- 15 3. A method according to Claim 2, wherein providing the service to the service requestor comprises providing the service to the service requestor without requiring creation of a contract for the use of a specific service instance.
- 20 4. A method according to Claim 1, wherein providing a web service comprises:
identifying a plurality of ports operative to provide web services meeting the service category definition at the web service hub; and
providing the web service to the service requestor responsive to identification of the ports.
- 25 5. A method according to Claim 4, wherein identifying a plurality of ports comprises:
polling at least one web services node subordinate to the web services hub to identify at least one service provided by the node; and
updating a description of a service category responsive to the polling.

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6. A method according to Claim 5, wherein polling at least one web services node comprises examining a WSDL (Web Service Description Language) description maintained at a subordinate web services node.

5 7. A method according to Claim 5, wherein polling at least one web services node comprises polling a plurality of levels of web services nodes using a coordinated polling interval scheme.

10 8. A method according to Claim 7, wherein polling a plurality of levels of web services nodes using a coordinated polling interval scheme comprises using staggered polling intervals for adjacent levels of the web services domain.

15 9. A method according to Claim 1, wherein creating an electronic record of a contract comprises creating an electronic record of a first contract, wherein the method further comprises creating an electronic record of a second contract to provide web services that meet a service level criterion to the service requestor at the web services hub, and wherein providing a web service to the service requestor comprises providing the web service to the service requestor via the web services hub responsive to the electronic records of the first and second contracts.

20 10. A method according to Claim 9, wherein providing a web service to the service requestor comprises dispatching a service request from the service requestor in the service domain based on the electronic records of the first and second contracts and a service policy of the web services hub.

25 11. A computing system, comprising:
a web services hub that creates an electronic record of a contract for a service provider to provide web services meeting a web service category definition and provides a web service to a service requestor from a service domain responsive to the electronic record of the contract.

12. A system according to Claim 11, wherein the web service hub is operative to identify a plurality of ports operative to provide web services meeting the service category definition at the web service hub and to provide the web service to the service requestor responsive to identification of the ports.

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13. A system according to Claim 14, wherein the web service hub is operative to poll at least one web services node subordinate to the web services hub to identify at least one service provided by the node and to update a description of a service category responsive to the polling.

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14. A system according to Claim 13, wherein the web service hub is operative to examine a WSDL description maintained at a subordinate web services node..

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15. A system according to Claim 14, further comprising a web services domain comprising the web services hub and configured to poll a plurality of levels of web services nodes of the domain using a coordinated polling interval scheme.

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16. A system according to Claim 11, wherein the electronic record of a contract comprises an electronic record of a first contract, and wherein the web services hub is further operative to create an electronic record of a second contract to provide web services that meet a service level criterion to the service requestor at the web services hub and to provide the web service to the service requestor via the web services hub responsive to the electronic records of the first and second contracts.

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17. A system according to Claim 16, wherein the web services hub is operative to process a service request from the service requestor at the web services hub based on the electronic records of the first and second contracts and a service policy of the web services hub.

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18. A computer program product comprising computer program code embodied in computer-readable storage medium, the computer program code comprising:

5 program code configured to create an electronic record of a contract for a service provider to provide web services meeting a web service category definition at a web services hub of a service domain; and

program code configured to provide a web service to a service requestor from the service domain responsive to the electronic record of the contract.

10 19. A computer program product according to Claim 18, wherein the program code configured to provide a web service comprises:

program code configured to identify a plurality of ports operative to provide web services meeting the service category definition at the web service hub; and

15 program code configured to provide the web service to the service requestor responsive to identification of the ports.

20 20. A computer program product according to Claim 19, wherein the program code configured to identify a plurality of ports comprises:

program code configured to poll at least one web services node subordinate to the web services hub to identify at least one service provided by the node; and

program code configured to update a description of a service category responsive to the polling.

25 21. A computer program product according to Claim 20, wherein the program code configured to poll at least one web services node comprises program code configured to examine a WSDL description maintained at a subordinate web services node.

30 22. A computer program product according to Claim 18, wherein the program code configured to create an electronic record of a contract comprises program code configured to create an electronic record of a first contract, wherein the computer program code further comprises program code configured to create an

electronic record of a second contract to provide web services that meet a service level criterion to the service requestor at the web services hub, and wherein the program code configured to provide a web service to the service requestor comprises program code configured to provide the web service to the service requestor via the
5 web services hub responsive to the electronic records of the first and second contracts.

23. A computer program product according to Claim 22, wherein the program code configured to provide a web service to the service requestor comprises
10 program code configured to dispatch a service request from the service requestor in the service domain based on the electronic records of the first and second contracts and a service policy of the web services hub.